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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,625	04/06/2001	Abolfazl Khosrowbeygi	US 010167	9039

24737 7590 06/28/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
TRINH, SONNY	
ART UNIT	**PAPER NUMBER**
2685	5

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/827,625	KHOSROWBEYGI, ABOLFAZL	
	Examiner	Art Unit	
	Sonny TRINH	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-14,16 and 18-20* is/are allowed.

6)☒ Claim(s) *17* is/are rejected.

7)☒ Claim(s) *15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. **Claim 15** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "transmitter chip" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is believed that claim 15 should depend on claim 14, not on claim 4. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claim 17** is rejected under 35 U.S.C. 102(b) as being anticipated by Kung ("Kung"; U.S. Patent Number 6,037,825).

Regarding **claim 17**, Kung discloses a transmitter chip (column 1), comprising: a mixing stage; and means for operating in a current mode of operation to establish a constant gain of said mixing stage (figure 2, column 3 line 55 to column 5 line 55).

Allowable Subject Matter

3. **Claims 1-14, 16, 18-20** are allowed.

The following is an examiner's statement of reasons for allowance:

The present invention comprises the dynamic biasing of a transmitter chip. The transmitter chip comprises a variable gain amplifying stage, a biasing stage, a phase shifting stage, and a mixing stage. In response to a voltage control signal and a voltage intermediate frequency signal, the variable gain amplifying stage provides a current drive signal and a DC current control signal. While an ampere level of the DC component of the current drive signal and an ampere level of the DC current control signal vary as a function of any variations in the voltage control signal as well as any variation in the temperature, process performance, and supply power of the transmitter chip, a ratio of the ampere level of a DC component of the current drive signal to the ampere level of the DC current control signal is constant. The current drive signal and the DC current control signal establish the dynamic biasing block in a current mode of operation that maintains a constant gain of the mixing stage.

The closest prior art, Kung (US 6,037,825) shows a similar system for biasing of a transceiver integrated circuit. However, Kung fails to disclose "...a variable gain

amplifying stage in a transmitter chip, said variable gain amplifying stage comprising: a first circuit operable to provide a current drive signal in response to a reception of a voltage control signal and voltage intermediate frequency signal by said variable gain amplifying stage, said current drive signal having an AC current component and a DC current component; a second circuit operable to provide a DC current control signal in response to a reception of said voltage control signal by said variable gain amplifying stage; and wherein a ratio of a first ampere level of said DC current component of said current drive signal to a second ampere level of said DC current control signal is constant...".

This distinct feature has been added to independent claim 1 and renders it allowable. Claims 2-7 are allowed by virtue of their dependency on claim 1.

Regarding independent **claim 7**, Kung also fails to show "...a transmitter chip comprising: a variable gain amplifying stage operable to provide a current drive signal and a DC current control signal, said DC current drive signal having an AC current component and a DC current component; a biasing stage operable to provide a first DC current biasing signal in response to a reception of said DC current control signal; and wherein a first ratio of a first ampere level of said DC current component of said current drive signal to a second ampere level of said DC current control signal is constant..." . Claims 8-14, and 16 are allowed by virtue of their dependency on claim 7.

Regarding independent **claim 18**, Kung also fails to show "... a method for dynamically biasing a transmitter chip, said method comprising: generating a current

drive signal in response to a reception of a voltage control signal and a voltage intermediate frequency signal, said current drive signal having an AC current component and a DC current component; and generating a DC current control signal in response to a reception of said voltage control signal, wherein a first ratio of a first ampere level of said DC component of said DC current drive signal to a second ampere level of said DC current control signal is constant...". Claims 19-20 are allowed by virtue of their dependency on claim 18.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, 6th Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 703-305-1961. The examiner can normally be reached on Monday-Thursday and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed URBAN can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SONNY TRINH
PRIMARY EXAMINER

6/24/04